Listing of claims:

1. (Currently Amended) An apparatus for providing a temperature compensated reference signal, comprising:

a band-gap cell that is arranged to provide a first signal that has a first temperature response profile ~~at a first node~~, wherein the band-gap cell comprises a first bipolar device, a second bipolar device, a first resistor that is coupled between a first sense node and the first bipolar device, a second resistor that is coupled between the first sense node and a common node, a third resistor that is coupled between the common node and the second bipolar device at a second sense node, and an error amplifier that is responsive to signals from the first sense node and the second sense node, wherein a ~~the~~ resistor circuit is coupled between an output node of the error amplifier and the common node;

a PTAT circuit that is arranged to selectively provide a second signal that has a second temperature response profile to the common node when active;

a feedback circuit that is arranged to selectively activate the PTAT circuit in response to an output from the band-gap cell, wherein the output of the band-gap cell corresponds to the output node of the error amplifier; and

the ~~a~~ resistor circuit, that is coupled between the output from the band-gap cell ~~circuit~~ and the common node, ~~wherein the resistor circuit~~ is arranged in cooperation with the band-gap cell and the PTAT circuit to generate the temperature compensated reference signal at the common node as a combination of the first signal and the second signal such that the temperature compensated reference signal has a third temperature response profile that is determined by combination of the first temperature response profile and the second temperature response profile.

2. (Previously Presented) The apparatus of claim 1, wherein the first temperature response profile is different from the second temperature response profile.

3. (Original) The apparatus of claim 1, wherein the first signal and the second signal are currents, and wherein the resistor circuit is arranged to combine the currents that are associated with the first and second signals.

4. (Cancelled)

5. (Previously Presented) The apparatus of claim 1, wherein the first bipolar device and the second bipolar device are ratio scaled with respect to one another.

6. (Original) The apparatus of claim 1, wherein the feedback circuit comprises at least one of: a passive feedback circuit, an active feedback circuit, a voltage divider circuit, a gain scaling circuit, a resistor divider circuit, a capacitive divider circuit, and a stacked diode circuit.

7. (Original) The apparatus of claim 1, wherein the feedback circuit corresponds to a voltage divider circuit that senses the output of the band-gap cell.

8. (Original) The apparatus of claim 1, wherein the PTAT circuit comprises at least one of: a voltage reference circuit that is configured to provide the second signal as a voltage, and a current reference circuit that is configured to provide the second signal as a current.

9. (Original) The apparatus of claim 1, wherein the PTAT circuit includes a bipolar junction device that is arranged to provide the second signal as a current that is proportional to absolute temperature.

10. (Original) The apparatus of claim 1, wherein the PTAT circuit includes a bipolar junction device that is arranged to provide the second signal as a voltage that is proportional to absolute temperature.

11. (Original) The apparatus of claim 1, wherein the PTAT circuit is arranged to activate when an operating temperature associated with the apparatus reaches a temperature trip point.

12. (Original) The apparatus of claim 1, wherein the band-gap cell is referenced from at least one of: a high supply signal, a low supply signal, and a ground reference signal.

13. (Original) The apparatus of claim 1, wherein the temperature compensated reference signal corresponds to at least one of a current and a voltage.

14. (Currently Amended) An apparatus for providing a temperature compensated reference signal, comprising:

a band-gap cell means that is coupled between a first common node and a power supply node, wherein the band-gap cell means is arranged to provide a first signal that has a first temperature response profile at the first common node, wherein the band-gap cell means is also arranged to provide an output at a second common node;

a PTAT means that is arranged to selectively provide a second signal that has a second temperature response profile at the first common node when active, wherein the second temperature response profile is proportional to absolute temperature;

a sense means that is arranged to sense the output of the band-gap cell means at the second common node and selectively activate the PTAT means in response to the sensed output; and

a resistor means that is coupled between the second common node and the first common node, wherein the signal combination means is arranged to combine the first signal and the second signal at the first common node such that the output of the band-gap cell means at the second common node corresponds to a temperature compensated reference signal with a third temperature response profile that is determined by combination of the first temperature response profile and the second temperature response profile.

15. (Previously Presented) The apparatus of claim 14, wherein the PTAT means at least one of: a voltage reference means that is configured to provide the second signal as a voltage, and a current reference means that is configured to provide the second signal as a current.

16. (Cancelled)

17. (Previously Presented) The apparatus of claim 14, wherein the band-gap cell means is referenced at the power supply node from at least one of: a high supply signal, a low supply signal, and a ground reference signal.

18. (Previously Presented) The apparatus of claim 14, wherein the temperature compensated reference signal corresponds to at least one of a current and a voltage.

19. (Currently Amended) A method for providing a temperature compensated reference signal, comprising:

coupling a band-gap cell between a first common node and a power supply node;

coupling a resistor between the first common node and a second common node;

providing a band-gap voltage from the ~~a~~ band-gap cell at the second common node when the band-gap cell is active, wherein the band-gap cell is arranged to operate with a first temperature profile;

monitoring voltages at the second common node with a voltage divider to provide a feedback signal that is responsive to changes in the band-gap voltage;

coupling the feedback signal to an input of a PTAT circuit that has a second temperature profile;

activating the PTAT circuit in response to the feedback signal when an operating temperature associated with the PTAT circuit reaches a temperature trip-point; and

coupling an output signal from the PTAT circuit to the first common node when the PTAT circuit is active such that the temperature profile associated with the ~~bang-gap~~ band-gap

voltage is modified by the PTAT circuit to create a third temperature profile that corresponds to the combined temperature profiles of the band-gap cell and the PTAT circuit.

20. (Original) The method of claim 19, wherein the first temperature profile corresponds to a band-gap curve, the second temperature profile corresponds to a proportional to absolute temperature curve, and the third temperature profile corresponds to a curvature corrected band-gap curve.